

University of Tartu
Faculty of Arts and Humanities
School of Theology and Religious Studies

Elise Nemliher

Associations between schizotypal personality and mystical experiences

Masters' thesis

Supervisor *dr theol* Roland Karo

Tartu 2017

Contents

Introduction	3
1. Outlining the pieces.....	13
1.1 Mystical experience	13
1.1.1 Defining mystical experience.....	13
1.1.2 The profile of a mystic	15
1.1.3 Experiencing mystical experiences	16
1.2. Schizotypy.....	17
1.2.1 Personality and personality disorder	18
1.2.2 Schizotypal (personality) disorder	19
1.2.3 Schizotypy as a part of personality	20
1.3 Creativity and creative (artistic) personality	21
2. Putting the pieces together	23
2.1 Schizotypy and Creativity	23
2.2 Mystical experiences and schizotypy.....	24
2.3 Mystical experience and creativity.....	26
2.4 Conclusions	27
3. Empirical data	28
3.1 Case study: St Teresa of Avila	28
3.2 Results from the data.....	35
3.1.1 Mystical experiences.....	35
3.1.2 Schizotypy.....	36
3.1.3 Mystical experiences and schizotypy.....	37
3.1.4 Conclusion	40
4. Discussion	41
Summary	43
References	44
Resümee	49

Introduction

Delineation of the topic and reasons for its choice

The theme of the research is the interrelations between schizotypy¹, creativity and mystical experiences. The emphasis is on the associations between schizotypy and mystical experiences, with creativity as a possible mediator.

Over time, many studies have been conducted, to examine the associations between altered states of consciousness and psychopathology² and oftentimes they have been associated. However, I am not aware of any studies examining the relationships between the nonclinical variations of the traits seen in psychopathology and a persons' ability to experience altered states of mind. Researchers have wondered why serious mental illnesses have not disappeared over the course of evolution and have theorized that the reason for it may be that the relatives of the patients or people with borderline thought patterns but without acute pathology may have certain advantages in some aspects of life, for example they have been shown to be more creative. (Grant et al 2014) Creativity in itself opens many doors to different human experiences and it may be that different aspects of creativity and different combinations of personality serve different purposes in the human condition. The current thesis is an interdisciplinary approach, and it has its purpose in trying to shed light on this question.

¹ When discussing schizotypy as a disorder I use the terms *schizotypal disorder* or *schizotypal personality disorder*. When discussing schizotypy as a cluster of traits I use the terms *schizotypy* or *schizotypal personality*.

² The focus of my research is strictly non-clinical. Although I write about the schizotypal disorder to give a better understanding of the concept of schizotypal personality, it is not the main focus and the intention is not to give any kind of diagnosis, but to map out the associations between personality traits and mystical capacity.

Purpose of the research, research questions and hypothesis

The aim of the research is to find if there may be any interrelations between schizotypy and mystical experiences. More specifically, to find out what effects does high appearance of non-clinical schizotypal traits have on a persons' ability to achieve altered states of consciousness, specifically mystical experiences. I also briefly outline the possible theoretical effect of creativity upon the capacity for mystical experiences.

The research questions are: Does the presence of schizotypal traits effect the persons' ability to achieve mystical experiences? What effect do high schizotypal levels have on the persons' ability to achieve mystical experiences? What is the possible role of creativity in mediating these two?

The hypothesis is: People with higher levels of non-clinical schizotypy are more likely to achieve mystical experiences compared to people with lower levels of schizotypy.

Method

The empirical portion of the thesis consists of a case study and an analysis of the data gathered during fieldwork.

Case Study

The subject of the case study is the autobiography of Teresa of Avila. I use directed content analysis to find out if Teresa could possibly be classified as being schizotypal based on the autobiography. Because nonclinical schizotypy is a milder version of clinical schizotypy, I used the DSM IV and ICD 10 diagnostic manuals to decide whether her profile was schizotypal or not. I compiled the characteristics outlined in both manuals. The reasoning for this is that because schizotypal personality is a milder version of schizotypal personality disorder, the traits should be essentially the same. The traits outlined in the diagnostic manuals are also the ones that are brought as typical examples of the traits that are prevalent in schizotypal personality in topical literature.

Fieldwork

The data analyzed was gathered by participant observation during a holotropic breathwork course that took place in Algallika center in Läänemaa. The course took place from 26.05-29.05 2016. During the course, each participant had two breathing sessions, which lasted for about two hours each, depending on the length of the experience the breather had. The sessions took place on the second and third day. The course started with an open circle, where everyone introduced themselves, explained why they were there and what they expected from the course. This is where I disclosed my reasons for being there, introduced my research and asked everyone to consider participating. When the open circle was concluded, I gave everyone who was interested the form for informed consent and questionnaires. I answered all the questions they had and further explained my intentions and methods.

Questionnaires used

The questionnaires used were MEQ 30 (Mystical Experiences Questionnaire) developed by Katherine MacLean, Matthew Johnson, Jeannie-Marie Leoutsakos and Roland Griffiths (2012), and O-Life (Oxford-Liverpool Inventory of Feelings and Experiences) short-scales version by Oliver Mason, Yvonne Linney, Gordon Claridge. (2005). Before using the questionnaires, I contacted the corresponding authors and asked for permission. Both of the questionnaires were used in English as they originally were. There was two reasons for using the original tests in English and not translating. First, most of the data was expected to be gathered from courses outside Estonia and the language was therefore English. Because the session in Estonia was led by a Danish therapist and people were from more than one nation, the participants had to be able to speak English. Taking all this into account, it seemed reasonable that the results have more comparative value if they are in the same language. The other reason was, that if the tests were to be translated, they would also have to be validated in Estonian and it was not possible in the scope of this thesis.

For making filling the tests as comfortable as possible and because people were to be breathing at different times, I gave each respondent both of the tests in the beginning the course, after the open circle in exchange for the signed informed consent form. I stressed the importance of filling out the O-Life questionnaire before and MEQ after the breathwork session and because there were so few people I could make sure that they followed these instructions. Before the session I gathered the O-Life questionnaires and at the end of the day I gathered the filled Mystical Experiences questionnaires, to make sure that the questionnaires were filled as soon as possible after the breathing experience. My intention was to gather all of the data during the first day of sessions, to avoid the possibility of the experience tampering with the O-Life results and so that the experience had on the first day and the one had on the second day would not effect one another. But despite that, three people filled both of the questionnaires on the second day, for different reasons. To be able to tie the filled forms to the respondent and with each other, I asked them to write down three last numbers of their phone number on each paper. I chose this way, because it made it impossible to know, who the correspondents were, but the numbers were important enough for making it easy for them to remember.

Participants

Nine people filled out both of the questionnaires. Three were male, six were women. The oldest respondent was 50 years old, the youngest was 26, mean age was 41.2 years. Four of the respondents were Estonian, two were with other nationalities and three did not specify.

Analysis

Because the sample size was so small, I used crosstabulation as a means for analysis. I calculated the mean scores for the results of mystical experiences, and for four dimensions of schizotypy measured by O-Life, which are Unusual Experiences, Cognitive Disorganisation, Introvertive Anhedonia and Impulsive Nonconformity. To be able to compare the results with crosstabulations I divided the respondents into two groups on each characteristic, using the mean score as

means for separating. Anyone with the score lower than or equal to mean score was in the low group, anyone with higher than mean score was in the high group. After this, I was able to look for patterns in the crosstabulations between the intensity of the mystical experience according to the scale and the different schizotypal traits.

Terminology

Mystical experience – an altered state of mind, in the center of which is the feeling of unity. Many different definitions are given by different authors, a more comprehensive discussion of these is presented in chapter 1.1.1 “Defining mystical experience”.

Schizotypal (personality) disorder – a member of schizophrenia spectrum disorders, seen most commonly amongst the relatives of schizophrenics. More on this subject can be read in chapter 1.2.2. “Schizotypal (personality) disorder”.

Schizotypal personality – a cluster of traits that are also seen in the schizotypal disorder, but that are not extreme and the person having these traits cannot be diagnosed with mental illness. The concept of schizotypy is further discussed in the chapter 1.2.3 “Schizotypy as a part of personality”.

Research done on the subject so far

To the best of my knowledge, there is no research focusing on the link between schizotypy and mystical experiences. Most of the research has been done on the associations between psychopathology and mystical states, creativity and mystical states or creativity and psychopathology or schizotypy.

One of the most similar studies to this one is conducted by Kerri Michalica and Harry Hunt (2013). In their research they focused on the associations between schizophrenia, creativity and mystical experiences. They also included the aspect of schizotypy, but they concentrated on the associations between schizotypy and creativity. They found, that artists and schizophrenics had higher tendency to achieve mystical states compared to the control group and that for schizophrenics the mystical experience was most often a negative one.

Most important sources used

The sources used are theoretical and empirical. The most important theoretical sources used are “The varieties of Religious Experience” by William James, “Mysticism: A Study in Nature and Development of Spiritual Consciousness” by Evelyn Underhill, articles written by Mason, Claridge et al, especially the article “The Oxford-Liverpool Inventory of Feelings and Experiences (O-Life): Further description and extended norms”. The most important empirical sources are the two questionnaires used (O-Life short-scales by Mason, Linney, Claridge 2005 and MEQ by MacLean, Johnson, Leoutsakos and Griffiths (2012) and the data gathered from them and the autobiography of Teresa of Avila called “The Life of St. Teresa of Jesus, of The Order of Our Lady of Carmel”.

The books by James and Underhill give the frame for mystical experiences that I operate with. “The Varieties of Religious Experience” by James gives an overview of the nature of mystical experiences, mysticism and the description of mystics. James writes from an outsider’s position and has an approach of a psychologist. Underhill in her book “Mysticism: A Study in Nature and Development of Spiritual Consciousness” writes on the same subjects, but from an insider perspective.

Mason and Claridge et al in their articles write about schizotypy and explain the approach to schizotypy as an aspect of the personality. The article “The Oxford-Liverpool Inventory of Feelings and Experiences (O-Life): Further description and extended norms” is one of the most thorough ones. Theirs is the concept I use in my approach and the article named is the one that inspired me on the choice of the subject.

O-Life short-scales (Mason, Linney, Claridge, 2006) is the shortened version of the original O-Life questionnaire. It consists of four aspects of the schizotypal personality and the presence of each aspect is measured by *yes* or *no* questions, the number of which varies. In the Unusual experiences category one finds 12 items, in the Cognitive Disorganisation 11 items, the Introvertive Anhedonia has 10 items as well as Impulsive Nonconformity.

MEQ is a 30- item Likert type scale for measuring the depth of the mystical experiences. It has 30 questions, measuring four factors of mystical experiences. The factors are unity, positive mood, transcendence of time and space and ineffability. The factors can be scored together or as different categories. The questionnaire can be answered with the scale starting from 0, which stands for none and ending with 5 which represents extreme.

The autobiography by Teresa of Avila is the description of her life, starting from childhood. The book describes her path on the way of becoming a mystic, describes her relationship with God, different experiences and hardships she has overcome with the help of God. The purpose of the book is to seek for advice and guidance with her experiences.

Problems during writing the thesis

The biggest problem that occurred during writing this thesis was with gathering the data for analysis. Because of the problems with gathering the data, the concept changed and the empirical portion of the thesis consists of a case study and qualitative analysis of data from nine people.

The primary concept of the thesis was decided in late autumn 2016. The thesis consists of a theoretical and empirical part and the purpose of the empirical part was to test whether the theory applies. The empirical part was supposed to be conducted during holotropic breathwork sessions using questionnaires and interviews. The intention was to conduct a statistical analysis of the data and content analysis of the interviews. The reason for gathering data at holotropic breathwork sessions was that in my previous research (Nemliher 2015) I had come to the conclusion that holotropic breathwork sessions were a suitable method of inducing mystical experiences and because of the nature of the practice it eliminated a lot of ethical problems (vs for example using drugs as an inducer). However, the groups on these sessions are small and a lot of people are expected to refuse to participate in the research. For gathering sufficient data, the research had to be conducted in many groups. Because there are very few sessions held in Estonia (once a year

maximum) I applied for a Kristjan Jaak scholarship from Archimedes. I applied for three times and each time the application was rejected.

Because I had been able to participate in an Estonian session with the help of my thesis supervisor, I had gathered some data and to be able to continue with the research according to the plan, I decided to use online questionnaires. This widened the scope and enabled me to contact a lot more groups than I had originally planned – I had decided to only participate in English-speaking European groups, to keep the costs and travelling distance lower. I contacted all the English-speaking groups I could find all over the world and sent them a request to participate in my research, explaining what, why and how I conduct the research. However, the response rate was extremely low – from about 20 letters sent only five had a response and from those, only three had sessions in the timeframe that I had. I forwarded the questionnaires to the therapist conducting the Breathwork session. For each group, I sent the questionnaire a week or two earlier, so that they could familiarize themselves with it and ask any questions they needed to. I also sent a thorough explanation of the method of my research – why I used these questionnaires, in which order and how they should be filled, as well as a form of informed consent (which I also included in the questionnaires themselves) and assured that everything was confidential and that all the participants who had decided to fill the questionnaires, had a right to withdraw their participation at any moment. One of the therapists forgot to send questionnaires to the participants and from another group I did not receive any filled questionnaires. More than half of the participants in the third group (about 20 people in total) had filled out the first questionnaire, but only one person had filled both, but had also left some of the questions unanswered. Because of the unanswered questions and methodological differences (in the first group I knew when the questionnaires were filled, in the case of the last person I did not) I decided not to use the data from that person and was left with nine filled questionnaires from the Estonian holotropic breathwork session. After consulting with my thesis supervisor I decided to additionally conduct a content analysis of the autobiography of Teresa of Avila to reduce the risk of going completely astray with my conclusions because of the small sample. Since Teresa is one of history's greatest mystics but also gives vivid confessions

about her life, I thought if the linkage between schizotypy, mysticism and creativity were to be found at all, Teresa's autobiography was probably the place to look for it.

As previously stated, I had also planned on analyzing interviews with the participants, because part of the original hypothesis was that the mystical experiences experienced by people with higher levels of schizotypy had more fantastic content – for example seeing different visual hallucinations or experiencing auditory hallucinations *vs* experiencing none of these things. Trying to gather the data via online questionnaires, I therefore included open-ended questions, but as already said, the response rate was extremely low. In addition, there were problems with the interviews during holotropic breathwork session in Estonia as well – though there were a couple of interviews that were potentially informative, most were very superficial. Because of this, I decided to exclude the interviews from the analysis altogether.

The very last of the problems was with finding the literature. All of the occurrences used in the construction of the theory are very complicated and have many aspects to them. The concepts of schizotypy and creativity were the most problematic. Schizotypy and the theory of schizotypy as a potential personality trait does not have a long history and though it is getting more attention from researchers nowadays, it is not uniformly accepted and there is not a lot of research done on the subject. Creativity on the other hand is a very highly researched concept, but the research done is highly specific, concentrating on only some aspects of creativity, without there really being a consensus as to what creativity really is. For example, one of the most researched aspects is divergent thinking as one of the main criteria for being creative, but as Marilyn Fryer points to the fact, that convergent thinking is also a necessary aspect in creative thought and so the newest research on creativity is very fragmented (Fryer 2012: 23).

The structure of the thesis

The thesis consists of the theoretical and empirical portion. The aim of the theoretical portion is to give an overview of the different aspects of the theory and

to show how they may be pieced together. In the first chapter I give an overview of the different pieces. In the first subchapter I concentrate on the mystical experiences, I give an overview of some of the definitions, the profile of the mystic and what happens while experiencing the mystical experiences. In the second subchapter I introduce the concept of schizotypy. I start with introducing the concept of personality and personality disorders. Then I give a brief overview of the schizotypal disorder to give a better understanding of the concept of subclinical schizotypy and lastly I introduce the approach of schizotypy as a personality type. In the third subchapter I give a brief and general overview of the artistic experience and artistic temperament.

In the second theoretical chapter I outline how the pieces introduced fit together. In the first subchapter I outline the overlap between creativity and schizotypy, in the second mystical experiences and schizotypy and in the third, I outline the similarities between mystical experiences and creativity. In the final and concluding subchapter I outline the way these pieces come together as a theory, that I investigate in the empirical portion of the thesis.

The empirical portion consists of the case study and analysis of the data which are presented as two subchapters. In the first subchapter I present the results of the content analysis of the biography of Teresa of Avila. I outline the many aspects of her personality and show how they relate to schizotypal personality. In the second subchapter I analyze the data gathered from the holotropic breathwork session and present the results.

The last two chapters are the discussion part of the thesis, where I analyze, how the results from the empirical data relate to the theory, followed by the general summary.

1. Outlining the pieces

The aim of this chapter is to outline the different pieces of my theory that there is a connection between the ability to achieve mystical experiences and schizotypy, especially if the person also has traits commonly seen in artists. First I will introduce the concept of mystical experience, then schizotypy and finally the creative or artistic personality.

1.1 Mystical experience

1.1.1 Defining mystical experience

Mystical experience is a complex occurrence that has many aspects to it and is somewhat dependent on the cultural and religious context that is therefore hard to define. Because of this, there are many different definitions of mystical experiences. Here I present three definitions.

Probably one of the most famous definitions comes from William James. According to him, mystical experience has to have four characteristics to be called a mystical experience. These four characteristics are: ineffability, noetic quality, transiency and passivity. Ineffability means that the experience cannot be expressed with words, it must be directly experienced. In this regard, mystical experience is an intellectual experience rather than an emotional one. Noetic quality means that the person experiences the ultimate truth that is unattainable for the intellect, it is something you intuitively know. If these two characteristics are present, then the experience can already be classified as mystical. However, the two are usually accompanied by another pair, but these are not as prominent. Mystical experience is transient, so with some rare exceptions, it cannot last for more than an hour or two, usually less and after that it is gone. Afterwards the experience can only be

remembered poorly, but if it happens again, the experiencer will recognize it. With every new experience, the meaning and importance of it will grow. The last quality – passivity – means that even though it is possible to facilitate mystical experiences, e.g. by meditation, bodywork etc., in the experience itself the mystic is not active, her/his will is gone and sometimes s/he feels that s/he's in the hands of a higher power. (James 1958: 292-293).

James's is one of the broadest definitions and does not hold much value in terms of differentiation. In fact, James seems to include drunkenness as a part of mystical consciousness (James 1958: 297). Because James' definition is so inclusive, there are many who do not see it as the most useful of definitions. Evelyn Underhill, for example, has discussed the matter at length and presented her own definition. She sees mysticism as (1) practical, (2) wholly transcendental and spiritual, (3) experiencing the One will take over the person's life and is not of a passing importance and (4) the mystic will live their life in a union with this One. (Underhill 1911: 78-79).

The important dividing line between Underhill and James seems to be the fact that for James mystical experience is something that anyone can attain to and for Underhill mystical experience is something reserved almost exclusively for the dedicated mystics. Also, James sees the mystical experience as having a deep influence and changing the life of the person experiencing it (James 1958: 293-294), but Underhill writes about mystical experiences exclusively in connection with mysticism and as being a part of mystics' whole lives (the so-called Mystical Way). (Underhill 1911: 79-78) In Underhill's view mystical experience is the union with the Absolute. Mysticism is the "science" of it and the mystic is the person attaining to this union (Underhill 1911: 70-71).

Another example of a completely different way to define mystical experiences is Walter Pahnke's. Like James, Pahnke sees mystical experiences as achievable to anyone, but unlike James he has nine pretty specific categories that are necessary for an experience to classify as mystical. His categories are: (1) unity, (2) transcendence of time and space, (3) deeply felt positive mood, (4) sense of sacredness, (5) objectivity and reality (compare to James' noetic quality), (6)

paradoxicality, (7) ineffability, (8) transiency and (9) persisting positive changes in attitudes and/or in behaviour. Of these categories, only the first must definitely be present for an experience to classify as mystical. The more of the rest of the categories are present, the deeper and more “authentic” the experience (Pahnke 1963: 46-83).

There are, thus, investigators who say that mystical experiences are attainable to anyone, (James, Pahnke and many others) and there are those who see them as a part of what might be called the Mystical Path, like Underhill. Either way, mystical experiences are the deepest core of mysticism and mystics are the most probable recipients of the mystical experiences.

1.1.2 The profile of a mystic

As for the ability to experience mystical experiences or to become mystics, it seems to be universal to all people. (Underhill 1911: 50-51). Walter T. Stace has said that there is a rudimentary mystic in all or nearly all people, even though in some it may be more deeply hidden in the unconscious (Stace 1960: 21). Furthermore, he says that even though we see some people as mystics and others as not, the line is not really that clear (Stace 1949-1950: 24). There have been studies conducted to see on what does the ability to experience mystical experiences depend and there are many important factors such as the cultural background and the belief system (e.g. Andersen et al 2014: 237) and personality, which may be the most important of them all. In fact, Underhill has maintained that mysticism is directly linked to personality traits (Underhill 1911: 86).

For example, people who have mystical experiences are generally more sensitive to hypnosis than people who do not. (James 1958: 193-194) In addition, there are several telling traits that can be seen in people prone to mystical experiences. They are emotionality, hot temper, intensity (James 1958: 35-37) and sensitivity (James 1958: 362, Underhill 1911: 207). They are self-surrendering (Underhill 1911: 207), drawn to mysticism and metaphysics (James 1958: 37), they seek harmony (Underhill 1911: 207) and are observant (Underhill 1911: 66).

Of course, it is one thing to list characteristics, but then there is also the question of whether these characteristics are *inherent* to everyone who will or has experienced mystical experiences or are they the *product* of mystical experiences. If a person experiences something overwhelming, it is clear that it will affect the person. James sees experiencing overwhelming religious states as inevitably transforming people but he also sees the ability for them as being genius in religion and that is *already* a part of them. Similarly to other geniuses, he sees mystics oftentimes as mentally unstable. Psychological abnormalities are probably even more prevalent in religious mystics than in other geniuses. James says that without exception mystics have higher emotional sensitivity and oftentimes their inner lives are controversial, they tend to be melancholic, they have a tendency for extremities, they tend to be riddled with obsessions, they fall easily into trance, hear voices, see hallucinations and are prone to all kinds of things that are usually considered pathological. However, these are the very same things that give them the religious power and authority that they have. (James 1958: 24)

1.1.3 Experiencing mystical experiences

As I showed in the definitions section of mystical experiences, a large proportion of the definitions concern what the person experiences *during* a mystical experience. During the mystical experience, people often have a form of feeling of unity (f.e Pahnke 1963: 46, Underhill 1911: 78-79, Stace 1960: 132), they also experience strong emotions, which can be positive like bliss (Pahnke 1963: 62, Proudfoot 1985: 77) or negative like fear (Proudfoot 1985: 77)

There are many occurrences that are usually associated with mystical experiences. They are not the core of the mystical experience, but oftentimes accompany it.

The most common and well-known occurrences during mystical experiences are hallucinations (James 1958: 201). The most common forms of hallucinations are visual and auditory, but they do not have to be limited to these two forms. Hallucinations can be connected to any of the senses, e.g. touch or smell. Another common occurrence are automatisms, for example automatic writing

(Underhill 1911: 247-249) or uncontrollable speaking (Seppälä 2003: 134). All the automatisms have varying degrees of intensity, starting with simple inspiration and ending with the feeling of being taken over by another personality. In the middle is the feeling of hands working by themselves which is quite commonly experienced by artists. (Underhill 1911: 271-272) In some mystical traditions, for example in Syriac tradition, bodily effects are even more prevalent and amongst other effects mystics may become paralyzed, their skin may turn red, they may lose balance and it is not uncommon to start making different noises (Seppälä 2003: 147-148).

Other reported side effects that may occur during mystical experiences are trances and different paranormal phenomena like telepathy or clairvoyance. (Vöröš 2013: 392) The extraordinary sensory experiences that the mystics have may be fruitful and positively connected to the mystical experience or signal pathology and be disconnected from the mystical experience. Underhill here gives an example of Teresa of Avila seeing Satan and trying to get rid of him by the use of holy water. She states that these side effects are not an integral part of mystical experiences but rather express the exhaustion and tiredness of the mystic. (Underhill 1911: 250-251) Unlike Underhill, James views the hallucinatory side effects for the most part as pathological. But he does not see the pathology as anything particularly important. James believes that from mystical experiences comes knowledge and it is that knowledge, with the impact on a person's life, which is important. In other words, it is all about what the experience *does* to the experiencer. The effects can be various, e.g. the mystic may become incapable of taking care of him- or herself, but the mystics who are have a strong mind and strong personality will inversely become full of life and energy and the states of trance help it along. (James 1958: 318)

1.2. Schizotypy

In the previous chapter I described the profile of a mystic and I also described some of the effects that mystical experiences may have on people. As said in the beginning of the chapter, I see similarities between the profiles of mystics and people who have schizotypal traits. To better illustrate the similarities between the two, an introduction to the schizotypal personality is necessary. To understand

and illustrate it, I also introduce the concept of personality and personality disorders and the schizotypal disorder as mental illness.

1.2.1 Personality and personality disorder

Personality can be seen as consisting of various dimensions. Personality disorders occur at the extremes of these dimensions. Personality consists of factors, some of which are fluid, some are more stable and the manifestation of the factors depends on many variables. At the same time people have tendencies, meaning that in similar situations a person usually behaves similarly (for example the tendency to avoid conflict). Some of the tendencies are more pronounced and occur more often and more strongly. (Allik 2003: 36)

Personality disorder is a concept created as an attempt to organise maladaptive variants of personality. Different typologies have been developed, but every time the Diagnostic and Statistical Manual (DSM) is renewed, some personality disorder gets discarded or added, or joined together with another personality disorder. Reliability and validity of the diagnostic criteria for personality disorders are low and comorbidity (the simultaneous presence of two or more disorders) is high. (Kreegipuu 2003: 109) Personality disorders have too little in common and too many differences within them, to make a coherent category and have a uniform theoretical explanation (Kreegipuu 2003: 112). In addition, there is considerable heterogeneity among the people diagnosed with the same personality disorders, meaning that the large group of people who may be diagnosed with, for example, schizotypal disorder have nothing much in common, so there are no common denominators that characterize the group. (Widiger and Trull 2007: 72).

When we talk about personality, we talk about certain traits that form a continuum or a dimension of personality, where on the one end is for example introversion and in the other end is extraversion. This means that we can see different traits in different people in varying percentages. In people with personality disorders, some traits are expressed more extremely than we can see on the general population. Studies have shown that personality disorders can be explained through combinations and variations in personality traits, the most common typology being

the so-called Big Five (neuroticism, extraversion/introversion, openness to experience, agreeableness/antagonism and conscientiousness). (Kring et al 2010: 359) A combination of traits can be called a disorder, when the traits are maladaptive and inflexible. In this case, they cause personal distress or functional impairment or both (Kring et al 2010: 259). Taking all of this into account, Widiger and Trull (2007) suggest personality disorders should be seen as extreme and maladaptive variants of personality traits which in their normal variations can be recognised in everyone.

1.2.2 Schizotypal (personality) disorder

The schizotypal disorder and schizophrenia are thought to be on the same genetical spectrum (International Classification of Diseases (ICD) 10). This is supported by the fact that people who meet the criteria for diagnosis are more common among the relatives of schizophrenics (Cardinal and Bullmore 2011: 157).

Structurally schizotypal disorder can be seen as consisting of three aspects, positive, negative and disorganized which are also evident in schizophrenia. These are characterized by different symptoms and they do not have to be exclusive. (Mason and Claridge 2006: 204)

Two major manuals that are used to diagnose mental illnesses and disorders are DSM IV and ICD 10. DSM stands for Diagnostic and Statistical Manual of mental disorders and ICD is an abbreviation of International Classification of Diseases. The latest version of DSM is DSM V, but it is very recent and because the majority of research is still done based on DSM IV, I rely on the latter. ICD 10 describes schizotypal disorder, placing it under code F21, which is in the same category as schizophrenia. In DSM IV, the same thing is included with personality disorders and is called *schizotypal personality disorder* (Cardinal and Bullmore 2011: 157).

People suffering from schizotypal disorder can be described as suffering from cognitive distortions, incapable for close personal relationships and eccentric (Kring et al 2010: 356) According to some of the features described in ICD 10 and DSM IV, people with schizotypal disorders may look or act strangely (for example,

they may wear their clothes inside out) and believe things that defy norms, for example they may be convinced that people can affect other people with their thoughts or believe in mindreading to the point of paranoia and according behaviour (DSM IV, ICD 10). They may be anhedonic (ICD 10) and without close friends except for the first-degree relatives (DSM IV). There may be perceptual disturbances and even intense illusions and/or hallucinations. (ICD 10)

It is worthy of noting that the Estonian version of ICD 10 (RHK 10) strongly advises against using the concept of schizotypal disorder because of the similarities to schizophrenia and schizoid and paranoid personality disorders. The diagnosis of schizotypal disorder may be supported by the patient's relatives suffering from schizophrenia, but it is not a necessary precondition.

1.2.3 Schizotypy as a part of personality

Broadly speaking, schizotypy is a weak appearance of schizophrenic symptoms, but schizotypal people are clinically healthy, they do not meet the criteria for any psychiatric diagnosis (Stefaniak et al 2015: 243). They have schizophrenic-like patterns of thought and/or belief systems, but they are nonpsychotic (Weinstein and Graves 2001: 132). Grant et al (2014: 1) have stated that schizotypy is not necessarily a pathological occurrence. In fact, it can actually be useful, especially when combined with high intelligence.

Schizotypy, just as the schizotypal disorder, can be seen as consisting of three parts: positive, negative and disorganised schizotypy, though they do not have to exclude each other. Positive aspects of schizotypy include psychotic-like occurrences. A person with schizotypal personality, who has more traits that are characterized by positive aspects of schizotypy may be more prone to experience hallucinations or weird bodily sensations (Henry, Bailey and Rendell 2008: 16). Common traits are magical thinking, unusual perceptual experiences and paranormal beliefs (Lindell 2014: 1). People who have more traits that are in accordance with negative schizotypy are characterised by anhedonia (Henry, Bailey and Rendell 2008: 16). They may experience social anxiety, usually they do not have close friends, they do not show a wide range of emotions (Stefaniak et al 2015:

246) and there are very few things in life that they enjoy (Mason and Claridge 2006: 210). People who have more traits that are in the category of disorganised schizotypy may sometimes have odd speech or behaviour (Henry, Bailey and Rendell 2008: 16), they tend to act outside of the norm. For example, a person might enjoy other people to be afraid of them or taking the role of a clown. They may also indulge in reckless behaviour, such as reckless driving, consuming unknown substances or taking high financial risks. (Mason and Claridge 2006: 210).

1.3 Creativity and creative (artistic) personality

In this chapter I give a brief overview of artistic experience. I also introduce different approaches to creative or artistic personality type and give an overview of different personality traits that are common in this personality type. It seems to me that just as with schizotypy, there are many similarities between the so-called creative type and mystics.

The work of art is an expression of human experience and human values. The artistic experience is ineffable and passive in the sense that inspiration cannot be called at will. It is also compulsive one and it has noetic features, in the sense that the artistic inspiration is an overwhelming feeling of what to do. (Lee 1949: 103)

The romantic concept of a tortured artist who is controversial with every fibre of his/her being is well-known but is there really such a thing as artistic personality? There are many studies trying to pinpoint personality attributes that make up the personality of an artist. Necka and Hlawacz (2013: 183) say that with the exception of openness to experience (from the Big Five personality model above), there is no persistent correlation between creativity and personality traits. They have theorized, that one of the reasons might be that just like the image of the tortured artist shows, the artistic personality is all about paradoxes. (Necka and Hlawacz 2013: 182-183)

In their own study Necka and Hlawacz found that creativity is associated with being more active or having more active lifestyle and decreased emotional reactivity. They hypothesize that the first one is necessary for finding new

experiences and for the creation process itself and the second is necessary for an artist to be able to disclose him- or herself to the public. But these authors also say that these two characteristics have a bigger role only in the highly creative personality (versus an average creative person) and even then, they are not determinative. (Necka and Hlawacz 2013:187-188)

Agnoli, Corazza and Runco (2016: 175) found that *insight* is an important factor of creativity. They also found that openness to experience and extraversion were important for artistic, but not scientific creativity. They also found that self-efficacy is important, but only to a certain point.

In an earlier study, Feist found through meta-analysis that the creative person is autonomous, introverted, open to experiences, doubting in norms, confident, self-accepting, driven, ambitious, dominant, hostile and impulsive. Artists especially are emotionally unstable, cold, and ready to reject norms. The hostility is especially evident as a defence mechanism in situations where the artist might feel like their work is not understood or is criticized. He also says that artists are more emotionally sensitive and sees it as a necessary condition for a creative act. (Feist 1998: 299-301)

As can be seen from these examples, there are many personality dimensions that can be seen in creative people. One of the reasons for this is that creativity is a very fluid concept and there are different kinds of creativity, as can be seen even from this brief overview (e.g. artistic and scientific creativity) and there is considerable variance in traits in highly creative people and those with the levels of creativity seen in general populations. But the examples here may also illustrate the paradoxicality of the personality of the artist – it is difficult to pinpoint anything with certainty, because it is in constant change.

2. Putting the pieces together

The purpose of this chapter is to show how all of the pieces previously outlined fit together. In the first subchapter, I discuss the associations between schizotypy and creativity. In the following two chapters, I give an overview of how these two occurrences might have their part in experiencing mystical experiences.

2.1 Schizotypy and Creativity

The schizotypal disorder is part of the schizophrenia spectrum disorders and is more common amongst the relatives of schizophrenics (Cardinal and Bullmore 2011: 157), which is a very serious mental disorder and has a prevalence of about one percent. It impairs the life of a person suffering from it. It is genetic and affects everybody related to a schizophrenic person increasing their risk for developing it (Cardinal and Bullmore 2011: 154-155). Researchers have wondered, why the genes that cause an illness this serious have not died out. The reason for it may be that the relatives of schizophrenics, who have similar thought patterns but do not suffer from the inhibitory effects of schizophrenia exhibit high levels of creativity which in the long run outweighs the “cost” of schizophrenia on the general population. As stated by Grant et al (2014: 1), schizotypy may be a very useful trait, especially when paired with high intelligence.

There are many theories that associate creativity and schizotypy. Weinstein and Graves (2001: 135) even say that psychosis and creativity are two aspects of the same process and creativity, schizotypy and schizophrenia can all be mapped along a continuum and tracked down to the same cognitive background. Positive schizotypy especially can be associated with creativity. (Weinstein and Graves

2002: 148) Positive schizotypy is common amongst writers, artists, philosophers and other creative professions and people in creative professions have higher scores of schizotypy than people in non-creative professions (Lindell 2014: 1, Kyaga et al 2011: 378).

Positive schizotypy enables a person to see patterns where no one else can (Grant et al 2014: 1). Especially schizotypal traits, such as magical thinking and unusual perceptual experiences can be associated with creativity (Lindell 2014: 1). Grant et al (2014: 6) found that with positive schizotypy comes a tendency to make assumptions about stimuli, especially in ambiguous stimuli faster than people normally do. This results in a lot of mistakes, but it also allows novel interpretations and approaches.

It seems that though schizophrenia as a very serious mental illness impairs the lives of people suffering from it, the relatives of schizophrenics or people who have similar thought patterns to schizophrenia have abilities that may not be seen in the rest of the population. It seems to be the case especially amongst people who have schizotypal personality and who are very creative.

2.2 Mystical experiences and schizotypy

It is nothing new to claim that there may be a link between mystical states and psychopathology. Many mystics through history have retrospectively been diagnosed with some kind of mental illness. An interesting research was done by Stifler et al (1993). These authors found that using the Hood Mysticism scale (Hood 1975), it was impossible to distinguish between psychotic patients' and mystics' experiences. Parnas and Henriksen (2016) point to the many similarities between mystical states and the delusions of schizophrenics, for example, they share the aspect of the dissolving self and the noetic quality of the experience. They also make it clear that these similarities do not mean that experiencing mystical states is pathological or that the experiences of schizophrenics are mystical. Mystics cannot be seen as schizophrenics or vice versa (Parnas and Henriksen 2016: 76). Despite not being the same, these experiences do have so much in common that after a study conducted by Stifler et al, the investigators released one of the schizophrenia

inpatients who turned out to be a highly eccentric contemplative (Stifler et al 1993: 371). As James says, religious genius is prone to things that are usually seen as pathological (James 1958: 24-25)

When one compares a psychotic episode to mystical experiences, one finds that they share many things in addition to the common aspect of the dissolving of the self. Occurrences such as hallucinations, automatisms, e.g. uncontrollable speech or bodily effects like becoming temporarily paralyzed can without a doubt be seen as pathological. Distinctions between mystical and pathological states are made by the fruits of the experience or the positive changes in a persons' life as seen in Pahnkes' typology of mystical experiences (Pahnke 1963: 83)

But if there are so many similarities between psychopathology and mystical states, it seems to make sense that there are also similarities between the milder, nonclinical variations of the traits that in their extreme forms are seen in pathology and mystical states. This brings us back to the topic of personality and schizotypy as a normal variation in personality. One can see that the schizotypal personality has a lot in common with the personality "profile" of a typical religious mystic. There are three aspects in which the similarities occur.

One of the traits that is common in schizotypy is the tendency to act outside the norm. In the description of mystics, we do not really see it as a separate trait, but there are many traits that mystics have, that almost certainly lead to behaviour, that is not seen as a norm. Mystics are described as mentally unstable, hot-tempered with tendencies for extreme behaviours and intense. It seems to me that with all of these traits combined, it is almost inevitable that they lead to the behaviour that is not regarded as part of a general norm.

The second commonality between mystics and people with schizotypal traits is their tendency to believe things that are seen as unusual. For the mystic, it is manifested as being drawn to mysticism and in interest to mystical philosophies. In the case of schizotypy, it is described as magical thinking and paranormal beliefs, which both may include mystical themes. In the description of what happens during experiencing the mystical experiences, it is said that the mystic may experience for

example telepathy or clairvoyance. It seems probable that experiencing something like that induces even deeper belief in paranormal occurrences.

Both types of personality are also described as being more likely than an average person to experience hallucinations, different unusual bodily sensations and overall as prone to unusual sensory perceptions.

2.3 Mystical experience and creativity

Jason Brown has written an article where he thoroughly compares mysticism and creativity. He brings out many similarities. He says that there are similarities between the lives of mystics as well as creative and mystical processes. (Brown 2008: 365) Murphy (2010: 497) has even brought out that high activity in temporal lobes which has quite often been mentioned with respect to mystical experiences, correlates with artistic inspiration.

There are many instances where mystical experience is compared to an artistic experience or a mystic to an artist, e.g. in defining mystical experiences. For example, Pahnke sees experiencing arts and aesthetic experiences as borderline cases of mystical experiences (Pahnke 1963: 84). Another example is Stace using the same metaphors explaining the difference between the mystic and non-mystic (Stace 1949-1950: 24).

Based on the descriptions of personalities of mystics and artists, they are both sensitive, impulsive, emotional and insightful. These and even more similarities are outlined by many authors as well. For example, Underhill points out that both mystics and artists are considered extremely sensitive (Underhill 1911: 200), both can be seen as experiencing ecstatic states (Underhill 1911: 63), both are prone to hallucinations (Underhill 1911: 252), both can experience different automatisms in various intensity, for example, automatic writing or painting. These automatisms can take the form of inspiration, but in its extreme people can feel like their body has been taken over (Underhill 1911: 271-272) or forms a channel through which inspiration flows (Brown 2008: 366). Both personality types are also impulsive and hot-tempered (Feist 1988) and with complicated inner lives.

2.4 Conclusions

Firstly, I talked about the similarities between schizotypy and creativity. They are often seen as related and some scientists think that the reason why such a serious illness as schizophrenia is still on the scene today is that the relatives of schizophrenics may have exceptional abilities, especially in creativity. In the next chapter I outlined the similarities between the personalities of the so-called mystical type of personality and the schizotypal personality. They both tend to have thought patterns or beliefs that are not seen in general populations, they tend not to fit within the norms and they are both more prone to hallucinations and unusual experiences and bodily sensations than the general population. Finally I showed the similarities between the personalities of mystics and artists, but also the similarities between the artistic and mystical experience.

What can be gathered from this? It seems that there are connections between these three phenomena. Firstly, there are similarities between the types of personalities. There are also similarities between the mystical and artistic experiences, parts of which (e.g. hallucinations) are also prevalent in the schizotypal personality. From this, it seems that the underlying personality traits that are shared may be what helps to experience these kinds of experiences. It may be that the schizotypal personality with creativity is what helps the mystic to reach mystical experiences.

3. Empirical data

3.1. Case study: St Teresa of Avila

There is no doubt that St. Teresa of Avila is a great mystic. But does she fit in the profile drafted above and is she schizotypal?

Looking at the life of Teresa, it is clear that from early on she is different than other children. She starts her autobiography from childhood. She writes that as a child she had a great wish to die as a martyr, she also wanted to be a hermit (Teresa 1904: 41). Of course, it is difficult to say anything about the personality of a person based on the descriptions of childhood in an autobiography, partly because it is written in hindsight and memories do fade and change. The other reason is that children develop fast and their views and even some aspects of the personality can change. But that of course does not mean that the description of the childhood is invalid. Strong emotions and thoughts, like for example the description of the wish to be beheaded (Teresa 1904: 41) are probably memorable and I believe they are illustrative of some of the traits inherent in her as a grownup.

Going further in the autobiography I encountered more and more instances where in one way or another I had the feeling that she was a person seeking solitude and wishing to be alone. She writes that in her late teens she spent nine months in solitude (Teresa 1904: 50). It is not clear whether it was because she wanted to or for some other reasons, but she does say that she started to “*despise the world utterly*” (Teresa 1904: 50). Later on, she does write that she wanted and needed solitude (e. g. Teresa 1904: 52; 208). It cannot be said that she secluded herself, she was still a part of the community and it seems from her writings that she had a pretty considerable social circle, but it is also clear that she strongly preferred to be alone. There are factors, like her visions and ecstatic states, that increased her need to be

alone, because she did not want to be in public when it happened (Teresa 1904: 129). Another reason for it might have been that she did not really fit in, especially after she started having visions and experiencing different altered states of mind (Teresa 1904: 181). These circumstances, however, do not change the fact that the need and wish to be alone were inherent to her already before that. Looking at the DSM IV manual, one of the characteristics that describes a schizotypal disorder is “*A tendency to social withdrawal*” (DSM IV). From the description of Teresa’s autobiography one can see that this trait is clearly present. It can be debated, as to how strongly was this trait expressed, because as already stated, she was not a recluse and she did have a considerable social circle, but I think it is clearly evident that this trait does exist.

Another characteristic that becomes evident while reading the autobiography is Teresa’s tendency to be obsessive. DSM IV describes the tendency for obsessive ruminations. Again, it is difficult to say from the autobiography what is obsessive rumination and what is not. Clearly, she talks a lot about God, her relationship with God and her wish to serve God. Seeing that the purpose of the book was to give an account of her life and experiences, it is necessary to write at length about these topics, and therefore in the context of the book, it does not seem possible to call them obsessive ruminations. But then again, she does write that already in her childhood she wanted to be a nun (Teresa 1904: 41) and later she convinced one of her brothers to become a friar (Teresa 1904: 48). These occurrences in themselves do not necessarily need to be obsessive, but especially the fact that she convinced her brother to choose a similar path as herself, which from the book seems to be an expression of *her* desires rather than her brothers’, at least initially, is instructive. Later in the book, she says that she loved to talk about God, it was the greatest pleasure for her (Teresa 1904:58) and she also loved to hear others to talk about God (Teresa 1904: 74). This can be seen as obsession and again, it is important to note that it began before she was even grown up and later on it only deepened. Taking into account that she was a deeply religious person it does make sense for her to obsess about God, but nevertheless, it is an obsession.

In addition to God, there seem to be two other topics that seemed to me to be her obsessions: her wickedness and Satan. Let us start from wickedness. Throughout she keeps talking about her wickedness, her great sins and her being undeserving. It is of course important to look at the context: she was a woman in the 16th century writing a book, which is a deeply unusual thing to do and in the context she was in, it might have been a kind of a defence mechanism. Of course, another reason for it is probably her being a deeply religious woman and being a humble woman. Still, it seems excessive for both cases.

Satan and his doings are also very repeated topics in her writings and one of the things she worries a lot about is whether her visions are from God or from the devil. But again, this was why she wrote the book, to ask for advice, and within her context it was a real problem. But there are other occasions where she writes about the devil and his works and especially towards the end of the book she seems to see the devil as a reason for a lot of things, including some of her own thoughts (Teresa 1904: 233). The devil's temptations are her constant worry and even in the context of the 16th century belief system it seems to be obsessive, even amounting to visions of the devil (Teresa 1904: 197). The devil and his deeds seem to form a paranoia for her.

Even though all the things that she seemed to be obsessed about seem to be somewhat well-reasoned – if you are a religious person, it is natural to think and talk about God and if the devil is thought to be a real threat, then again, it is natural to be worried. But even provided the fact that thinking about these topics at length is reasoned, the space she dedicates to them and especially the way she writes about them in her autobiography seem to meet the criteria for being an obsessive rumination.

Teresa seems to live in constant paranoia about the devil and afraid of his power and temptations. She sees him as a constant threat to her. It must be noted that on the one hand the context of the era does make the devil a serious threat, which also legitimises the devil as something real and not delusional. But even in this context, the fear still seems to be excessive. Interestingly, unlike the tendency for social withdrawal and obsessions, the paranoia does not seem to be inherent in

her in the childhood and it also seems to decrease later in life. Still, for the best part of her life, it seems that she is quite paranoid about the devil's works and sees them as constantly following her and trying to ruin her. A good example of why her thinking seems paranoid to me is the following train of thought from Teresa: *"...though it is always well to live in fear, and on our guard; for even if they do come from God, now and then the devil will be able to transform himself into an angel of light..."* (Teresa 1904: 101). Even though it is in the context of altered states of mind, it does illustrate well the fear and doubt she was living in. Both DSM IV and ICD 10 outline paranoia as a possible trait in the schizotypal personality. DSM IV describes it as *"Paranoid or bizarre ideas not amounting to true delusions"*, ICD 10 as *"Suspiciousness or paranoid ideation"*. To me it seems that the other halves of the descriptions – bizarre ideas and suspiciousness – can also be seen in her descriptions. Suspiciousness comes with paranoia, even the example brought here illustrates her suspicious attitude. She also describes plenty of occasions where her ideas are perceived as bizarre. Again, seeking for advice because this attitude is a part of the reason for writing the book, also, the ideas she has do not seem to be the kind that can be considered delusional. They are, however, very unusual and different.

As I have already mentioned, Teresa was prone to experiencing different altered states of consciousness. She did have mystical experiences and she also had visions and out of body experiences (e.g. Teresa 1904: 136). All of these experiences seemed to increase after she started having mystical experiences, but the visions and out of body experiences occurred long before that. For example, she writes: *"Christ stood before me, stern and grave, giving me to understand what in my conduct was offensive to Him. I saw Him with the eyes of the soul more distinctly than I could have seen Him with the eyes of the body. The vision made so deep an impression upon me, that, though it is more than twenty-six years ago"* (Teresa 1904: 64) This is one of the first experiences she describes and it precedes all the accounts that can be seen as mystical. Later on, she writes at length about different visions she has, especially colourful are her many encounters with the devil, e.g. cases of her throwing holy water to frighten Satan and his minions away (Teresa 1904: 197-198). She also writes about her conversations with God and from her

description it seems to be turning from rare occasion to almost an everyday conversation. For instance, *“Once, when I was much distressed at this, our Lord said to me, What was I afraid of? One of two things must happen—people would either speak ill of me, or give glory to Him. He made me understand by this, that those who believed in the truth of what was going on in me would glorify Him; and that those who did not would condemn me without cause: in both ways I should be the gainer, and I was therefore not to distress myself”* (Teresa 1904: 201). This description of her conversation with God does not come with any sort of change in her consciousness. In the case of altered states of mind, from the autobiography it is sometimes difficult to differentiate between mystical experiences, hallucinations and other kinds of experiences, but it is certain that she experienced a wide variety of altered states of mind. It is also clear that the further she got on her way to becoming a mystic, the more frequent they were, but some of the experiences she had long before her first actual mystical experiences. Hallucinations and other altered states of mind and unusual perceptual experiences are brought out in the descriptions of schizotypal personality disorder in both ICD 10 and DSM IV. If other traits that she has are subject to argument and are not expressed in the extremes, then proneness to hallucinations and other such experiences is certain and does not leave much room for argument.

Taking all this into account, I think it is safe to say that Teresa was also a very eccentric woman, which is again brought out as one of the signs of schizotypal personality disorder in DSM IV (odd or eccentric behaviour). There is no doubt that experiencing all of this would have the effect of one’s becoming eccentric as James says (James 1958: 24) but again, it seems to me that even before all the visions and other extraordinary experiences, Teresa was rather eccentric or at least an unusual woman already before all this. Clearly, she did not fit in. The things she experienced were the subject of public discussion more than once (e.g. Teresa 1904: 235). She also had frequent trouble with her confessors, because of the visions she believed to be from God (e.g. Teresa 1904: 50, 53, 135). They even wanted to perform an exorcism on her (Teresa 1904: 184). There are other aspects of her life as well that do not fit in with the customs. When she first decided to be a nun, she did it against her father’s will (Teresa 1904: 48) which I think in the context of the era was a very

unusual thing to do. Probably the best illustration of her eccentricity is the fact that she founded a new order. First of all, the fact that she did it in itself is very unusual and she was threatened with inquisition amongst other things (Teresa 1904: 213). But I think that the other aspect that is important here is the fact that she wanted to build this order because she was not happy with the rules in other orders, she thought they were too relaxed and she thought they needed to be stricter (Teresa 1904: 239).

There are also traits described in the diagnostic manuals that based on the autobiography one cannot really see, like cold or inappropriate affect or anhedonia. She writes about happiness that she feels when she experiences God in some way or even thinks about Him. There are cases where she seems to be melancholic and describes deep sadness she cannot escape from (e.g. Teresa 1904: 55), these cases seem to be tied to occasions where something dramatic happens. It is of course possible that she did have a tendency for anhedonia, but writing in hindsight, it is not in the book because it does not seem important as a part of the story. But from this autobiography, it seems that she cannot be seen as anhedonic.

As to cold or inappropriate affect described in both manuals, based on her autobiography, she seems as someone who has deep compassion and cares a lot for the people around her and she also writes many times about her struggle with trying to be more detached (e.g. Teresa 1904: 203). She does also write about her disgust with the world and wish to get away (e.g. Teresa 1904: 50), but it does not seem to be because of the coldness but rather because she wants to be united with God.

It also seems that it cannot be said that she does not have friends or confidants (ICD 10). Part of it is of course that she had to have a confessor and that in itself meant that she had other confidants than first degree relatives and in her case more than one. Maybe it cannot really be seen as an argument seeing that she really could not choose it, but there are also instances where she talks about her friends and seems to have a quite lively social life (e.g. Teresa 1904: 58, 70). Furthermore, the fact that she was able to reform the order, speaks for active social life, because it would not have been possible without a wide and powerful social circle.

Conclusion

Looking at Teresa's life and especially some of the more prominent traits shown in her autobiography, it seems that she has many of the traits described in ICD 10 and DSM IV. Most of them do not seem to be extreme enough to disturb her life, rather they are useful to her. Because of the amount of the traits expressed with the fact that they are not extreme enough to disturb her life but rather support and help her, it seems possible that she had a schizotypal personality.

Of course, it must be taken into account that it is an autobiography, written when she already was a mystic, which probably influences a lot what she writes about herself. Because of that some aspects of her personality may be pictured differently from what they really were, especially in hindsight, for example her wickedness. Despite that, I think that the underlying traits that are manifested are still prominent and observable.

It is also observable how her personality changed over time. Some traits become more prominent with experiencing more and more mystical states. These include eccentricity and obsessions. At the same time, other traits disappear or at least become less observable, such as her paranoia. It also seems to me that having these traits had a strong influence on her life and they are at least a part of the reason why she eventually became a mystic and achieved so much in her life. For example, being an eccentric person, she did things that were not always in accordance with the culture and context she was in.

It is also interesting to note that the personality traits she had were in accordance with the positive and disorganised symptoms of schizotypy and not the negative as negative symptoms are connected to withdrawal and avoiding new experiences and positive and disorganised symptoms are geared towards openness and new experiences. Another interesting observation is that though there is some overlap between the two diagnostic manuals used, she had a lot more traits described in DSM IV than in ICD 10.

Though I did not have clear-cut criteria for analysing the presence of creativity, some traits described above are observable without deeper analysis, especially the ones that also have overlap with the schizotypal personality, such as proneness to hallucinations or tendency to act outside the norm.

3.2 Results from the data

From the case study, we saw that Teresa had some schizotypal traits and possibly schizotypal personality, also that in Teresa's case the traits were prominent before she became a mystic. Some of the traits were even prominent when she was still a child. Can we also see these traits in regular people who are not mystics, but who are able to reach mystical states?

3.1.1 Mystical experiences.

For gathering the data on the mystical experiences, I used MEQ30 (Mystical Experiences Questionnaire) developed by MacLean, Johnson, Leoutsakos and Griffiths (2012) based on Pahnke's original 100-item questionnaire. The questionnaire used consists of 30 items that measure four factors which are unity, positive mood, transcendence of time and space and ineffability. The factor of unity consists of the subfactors of internal and external unity, noetic quality and sacredness. Each item is evaluated on a six point Likert type scale, where the lowest score is 0 (non, not at all) and the highest is 5 (extreme (more than any other time in my life and stronger than 4)) (the rest of the meanings are: 1 – so slight cannot decide, 2 – slight, 3 – moderate, 4 – strong (equivalent in degree to any other strong experience)). (MacLean, Johnson, Leoutsakos, Griffiths 2012)

The overall mean score in the group studied (9 people) was 2.73, the lowest score was 1.17, highest 3.63. Looking at the factors separately, the highest scored factor was positive mood with mean score of 3.09, maximum 3.83, minimum 1.33. Transcendence of time and space had a mean score of 2.72, maximum 3.33, minimum 1.00. Mean score for Ineffability was 2.81, maximum 3.67, minimum 1.37. Factor of Unity had the lowest scores with mean score of 2.57, maximum 3.73, minimum 1.07. Most of the experiences were described as moderate or moderately mystical.

3.1.2 Schizotypy

The test used to measure schizotypy was the O-Life (Oxford-Liverpool Inventory of Feelings and Experiences) first developed by Mason et al and consists of four sub-scales, which measure different aspects of schizotypy. These scales are Unusual Experiences, Cognitive Disorganisation, Introvertive Anhedonia and Impulsive Nonconformity. (Mason and Claridge 2006: 204) It is recommended to use the four scales separately (Mason and Claridge 2006: 208). In my research I used the short-scales version (Mason et al 2005: 294)

The Unusual Experiences scale consisted of 12 items, which were answered *yes* or *no*. Every yes-answer was scored one point and every no-answer zero points, so the highest score possible was 12. In the group studied the mean score was 5.33, with a minimum score of 2 and maximum score 8. The Cognitive Disorganisation scale consisted of 11 items and the scoring principle was the same. For this scale the mean was 3.44, minimum 0 and maximum 8. Introvertive Anhedonia scale consisted of 10 items, five of which needed to be reversed for scoring (in those cases no-answer scored 1 point and yes-answer 0 points). Scores for Introvertive Anhedonia were mean 3, minimum 1, maximum 5. Impulsive Nonconformity scale consisted of 10 items, three of which were reversed. Because one person did not answer to all the questions of this scale, the results of this scale are calculated with answers from eight people. The mean score was 3.88, minimum 2 and maximum 6.

Because the sample size is very small in my study, I will give the mean scores from the study of Mason et al as a comparison group (Table 1). They studied 928 pairs of twins. In their data they separated between male and female participants (Mason et al 2005: 295). Because of the small sample size, I will not do that.

Table 1. Comparison of mean scores

	Mean scores from the study of Mason et al (2005: 295)		Mean scores from my study
	Male	Female	
Unusual Experiences	3.17	2.92	5.33
Cognitive disorganisation	4.28	3.00	3.44
Introvertive Anhedonia	2.80	2.16	3.00
Impulsive Nonconformity	2.70	1.99	3.86

I find it interesting that the mean scores for all the categories, except cognitive disorganisation, are higher in the group I studied, meaning that in these categories my sample had more schizotypal traits than the general population. One possible explanation for this is that the data is gathered in the holotropic breathwork session which may be more attractive to people who are more schizotypal.

3.1.3 Mystical experiences and schizotypy

Because of the small sample size, I was not able to do any kind of statistical correlational analysis to see if there might be a significant correlation between schizotypy and mystical experiences. To evaluate the data, I thus used Crosstabulations.

Firstly, I divided the data into two groups by each measured variable. The mystical experience scale I used as one whole and did not analyse the different aspects of mystical experiences. I divided the data in half by the mean score, so everything under the mean score of 2.73 (including 2.73) I counted as low mystical experience score and everything above it as high mystical experience score.

With the schizotypal traits scales I also used the mean scores as midpoints, everything below the mean score I counted as low schizotypy and everything above it as high schizotypy. (Unusual experiences 5.33; Cognitive disorganisation 3.44; Introvertive anhedonia 3 and Impulsive nonconformity 3.86)

For all the schizotypal scales and their association with mystical experiences I made crosstabulations to see if there are any possible trends. The table for Unusual experiences and mystical experiences showed that there was an overlap between low scores in one and the other. Three people had both, low scores in mystical experiences as well as unusual experiences, one person had a low score in unusual experiences but high score on mystical experiences scale and one person had the results *vice versa*. Four people had high scores in both, mystical experience and unusual experiences scales. (Illustrated in Table 2)

Table 2. Mystical experience and Unusual experiences

Unusual experiences		Mystical experience	
		Low scores	High scores
	Low scores	3	1
	High scores	1	4

In cognitive disorganisation, one person had the score of zero and therefore the calculations were done with eight people. Three people were in the high cognitive disorganisation and high mystical experiences group and two people had low results in both questionnaires. One person was in the high cognitive disorganisation and low mystical experience group and two people had the results *vice versa*. (Illustrated in table 3)

Table 3. Mystical experience and Cognitive disorganisation

Cognitive disorganisation		Mystical experience	
		Low scores	High scores
	Low scores	2	2
	High scores	1	3

In relations between Introvertive anhedonia and mystical experiences there are three people in the high introvertive anhedonia and high mystical experiences group three in the both low groups. One person was in the high introvertive anhedonia and low mystical experience group and the rest in the high mystical experience and low introvertive anhedonia group. (Illustrated in Table 4)

Table 4 Mystical experience and Introvertive anhedonia

Introvertive Anhedonia		Mystical experience	
		Low scores	High scores
	Low scores	3	2
	High scores	1	3

Because one person did not answer the whole impulsive nonconformity questionnaire, this analysis was done with eight people. Three people were in the high impulsive nonconformity as well as in the high mystical experience group and one was in the low mystical experience and low nonconformity score group. The other four were equally divided in between. (Illustrated in Table 5)

Table 5 Mystical experience and Impulsive nonconformity

Impulsive nonconformity		Mystical experience	
		Low scores	High scores
	Low scores	1	2
	High scores	2	3

3.1.4 Conclusion

Analysing such a small group with the help of crosstabulations does not allow for any definitive conclusions. There are too few people and the risk for random distribution is too high. In the light of the theory chapters above one might suspect a pattern, especially between the categories of *unusual experiences* and *mystical experiences*, but again, nothing is conclusive, because it may be a coincidence. Nothing can be said about the role of creativity, because at the time of gathering this data, the concept was different and therefore there is no data about creativity.

4. Discussion

Even with the addition of Teresa's case study to the empirical part of my work the sample is way too small to allow for definitive conclusions. However, there are some aspects that are noteworthy.

The content analysis of Teresa's autobiography showed that there was a noteworthy number of traits that are also aspects of schizotypal personality. These were not the product of her many unusual experiences but were there since she was a child. This does not allow for a conclusion that schizotypy is something that helps a person to attain mystical experiences or that it is something that makes a person prone to them. It does, however, allow for a suggestion that Teresa herself was schizotypal. Nevertheless, for further conclusions, a more thorough investigation is needed.

As to the mediating effect of creativity, Teresa did seem to have traits usually thought to be a part of the so-called mystical temperament. The schizotypal traits that were prevalent were more in the category of positive schizotypy, which is also what is usually seen in the creative personality. It is known from research that creativity does have connections with mystical experiences and with schizotypal personality. My data is in accordance with this, but it does not allow for any further conclusions.

There was also no substantial support for the main hypotheses from the data, mostly because the sample size was too small to conclude anything. No strong patterns emerged.

Though the results did not confirm the hypothesis, there were other interesting points. Firstly, while analysing Teresa's autobiography, I noticed that

though she had a number of schizotypal traits, there were a lot more from the DSM IV manual than from the ICD 10. It is interesting, because they should be manuals for diagnosing the same phenomenon (Cardinal and Bullmore 2011: 157). There are several possibilities why this might be the case. It may be that because the emphasis is different in the manuals, different aspects of the same occurrence are brought out and Teresa just happened to have more of one type of traits. It may also be that because of the different wording, the traits in DSM IV were easier to track. Either way, I think this is something to pay attention to.

The other interesting aspect is that the group I studied had a lot higher schizotypy scores than the baseline results used from the study of Mason et al (2005: 295). Again, there are several possible explanations for this. One possibility is that it is just a coincidence, and the small number of participants does not allow for differentiation. To me it seems unlikely. A more likely explanation is that people engaged in practices such as holotropic breathwork do have more schizotypal traits. This is something that may be worth further investigation.

Summary

The research questions of the study were: Does the existence of schizotypal traits effect the persons' ability to achieve mystical experiences? What effect do high schizotypal levels have on the persons' ability to achieve mystical experiences? What is the possible role of creativity in mediating these two occurrences?

The working hypothesis was that people with higher levels of non-clinical schizotypy are more likely to achieve mystical experiences compared to people with lower levels of schizotypy.

To find the answer to my research questions and test the hypothesis, I conducted a directed content analysis of the autobiography of St. Teresa of Avila and gathered data from fielwork using MEQ and O-Life scales.

The analysis of Teresa's autobiography showed the result of her possibly having a schizotypal personality and that the schizotypal traits were prevalent before she became a mystic or even had her first mystical experience. However, this does not allow to make any conclusions as to whether or not the traits helped her on her journey or if there is a pattern. Teresa also had traits commonly associated with creativity, and this is in line with the theories that associate creativity with mystical experiences and with schizotypy, but no further conclusions can be made.

No definitive conclusions can be made from the data either, because the number of respondents was too little and does not allow for conclusive results.

From this data, the hypotheses could not be confirmed nor disproved and further research with more data is necessary.

References

Agnoli, S., Corazza, G. E., Runco M. A. Estimating Creativity with a Multiple-Measurement Approach Within Scientific and Artistic Domains – *Creativity Research Journal*, Vol 28, No 2, 2016, 171–176.

Allik, J. Isiksus ja seadumused. – *Isiksusepsühholoogia*. Ed. Allik, J., Realo, A., Konstabel, K. Tartu, Tartu Ülikooli kirjastus, 2003, 23-66.

Andersen, M., Schjoedt, U., Nielbo, K.L., and Sørensen J. Mystical Experience in the Lab. – *Method and Theory in the Study of Religion*. Vol. 26, 2014, 217-245.

Brown, J. The Inward Path: Mysticism and Creativity. – *Creativity Research Journal*, Vol. 20, No. 4, 2008, 365–375.

Cardinal, R. N., Bullmore, E. T. The Diagnosis of Psychosis. Cambridge, Cambridge University Press, 2011.

DSM

IV,

http://www.psi.uba.ar/academica/carrerasdegrado/psicologia/sitios_catedras/practicas_profesionales/820_clinica_tr_personalidad_psicosis/material/dsm.pdf

(Viewed 07.05.2017)

Feist, G. J. A Meta-Analysis of Personality in Scientific and Artistic Creativity. – *Personality and Social Psychology Review*. Vol. 2, No. 4, 1998, 290-309.

Fryer, M. Some Key Issues in Creativity Research and Evaluation as Seen From a Psychological Perspective. – *Creativity Research Journal*, Vol. 24, No. 1, 2012, 21–28.

Grant, P., Balser, M., Munk, A. J. L., Linder, J., Hennig, J. A false-positive detection bias as a function of state and trait schizotypy in interaction with intelligence. – *Frontiers in Psychology*, Vol 5, 2014.

Henry, J. D., Bailey, P. E., Rendell, P. G. Empathy, social functioning and schizotypy. – *Psychiatry Research*, Vol 160, 2008, 15-22.

Hood, R. W. Jr. The Construction and Preliminary Validation of a Measure of Reported Mystical Experience. – *Journal for the Scientific Study of Religion*, Vol 14, 1975, 29-41.

ICD-10, 2006 <http://apps.who.int/classifications/icd10/browse/2016/en#/F21>
(Viewed 07.05.2017)

James, W. The varieties of Religious Experience. New York, The New American Library of World Literature, 1958.

Kreegipuu, M. Isiksuse psühhopatoloogia (isiksusehäired ja nende tüübid). – *Isiksusepsühholoogia*. Ed. Allik, J., Realo, A., Konstabel, K. Tartu, Tartu Ülikooli kirjastus, 2003, 107-138.

Kring, A. M., Davison, G. C., Neale, J. M., Johnson, S. L. Abnormal Psychology, 11th ed. New York, John Wiley & Sons, 2009.

Kyaga, S., Lichtenstein, P., Boman, M., Hultman, C., Langström, N., Landén, M. Creativity and mental disorder: family study of 300 000 people with severe mental disorder. – *The British Journal of Psychiatry*, Vol 199, 2011, 373-379.

Lee, H. B. Projective Features of Contemplative Artistic Experience. – *The American Journal Of Orthopsychiatry*. Vol. 19, No. 1, 1949, 101-11.

Lindell, A. K. On the interrelation between reduced lateralization, schizotypy and creativity. – *Frontiers in Psychology*, Vol 5, 2014. (WWW <http://journal.frontiersin.org/article/10.3389/fpsyg.2014.00813/full>) (Viewed 07.05.2017)

MacLean, K. A., Leoutsakos, J.-M. S., Johnson, M. W., Griffiths, R. R. Factor Analysis of the Mystical Experience Questionnaire: A Study of Experiences Occasioned by the Hallucinogen Psilocybin. – *Journal for the Scientific Study of Religion*, Vol. 51, No. 4, 2012, 721–737.

Mason, O., Claridge, G. The Oxford-Liverpool Inventory of Feelings and Experiences (O-Life): Further description and extended norms. – *Schizophrenia Research*, Vol 82, 2006, 203-2011.

Mason, O., Linney, Y., Claridge, G. Short scales for measuring schizotypy. – *Schizophrenia Research*, Vol 78, 2005, 293– 296.

Michalica, K., Hunt, H. Creativity, Schizotypality, and Mystical Experience: An Empirical Study. – *Creativity Research Journal*, Vol 25, No 3, 2013, 266-279.

Murphy, T. R. The Role of Religious and Mystic Experiences In Human Evolution: A Corollary Hypothesis for NeuroTheology – *NeuroQuantology*, Vol. 8, No. 4, 2010, 495-508.

Nęcka, E., Hlawacz, T. Who has an Artistic Temperament? Relationships Between Creativity and Temperament Among Artists and Bank Officers. – *Creativity Research Journal*, Vol. 25, No. 2, 2013, 182–188.

Nemliher, E. Holotroopne hingamine müstilise kogemuse vahendajana. Bakalaureusetöö. Tartu, Tartu Ülikool, 2015.

Pahnke, W. N. Drugs and Mysticism: An Analysis of the Relationship between Psychedelic Drug Experience and the Mystical State of Consciousness. Massachusetts, Harvard University, 1963.

Parnas, J., Henriksen, M. G. Mysticism and schizophrenia: A phenomenological exploration of the structure of consciousness in the schizophrenia spectrum disorders. – *Consciousness and Cognition*, Vol. 43, 2016, 75–88.

Proudfoot, W. Religious Experience. Berkeley and Los Angeles: University of California Press, 1985.

RHK-10, <http://www.kliinikum.ee/psyhhaatriakliinik/lisad/ravi/RHK/RHK10-FR17.htm> (Viewed 07.05.2017)

Seppälä, S. In Speechless Ecstasy: Expression and Interpretation of Mystical Experience in Classical Syriac and Sufi Literature. Helsinki, Finnish Oriental Society, 2003.

Stace, W. T. Naturalism and Religion. – *Proceedings and Addresses of the American Philosophical Association*, Vol. 23, 1949 – 1950, 22-46.

Stace, W. T. Mysticism and Philosophy. Philadelphia and New York: J. B. Lippincott Company, 1960.

Stefaniak, N., Giot, C., Terrien, S., Besche-Richard, C. Impaired conscious memory in non-clinical schizotypy. – *Cognitive Neuropsychiatry*, Vol 20, No 3, 2015, 243–253

Stifler, K., Greer, J., Sneck, W., Dovenmuehle, R. An Empirical Investigation of the Discriminability of Reported Mystical Experiences Among Religious Contemplatives, Psychotic Inpatients, and Normal Adults. – *Journal for the Scientific Study of Religion*, Vol. 32, No. 4, 1993, 366-372.

St Teresa Of Avila The Life of St. Teresa of Jesus, of The Order of Our Lady of Carmel. Grand Rapids, MI: Christian Classics Ethereal Library, 1904.

Underhill, E. Mysticism: A Study in Nature and Development of Spiritual Consciousness. Grand Rapids, MI: Christian Classics Ethereal Library, 1911.

Vöröš, S. Demystifying Consciousness with Mysticism? Cognitive Science and Mystical Traditions. – *Interdisciplinary Description of Complex Systems*. Vol. 11, No. 4, 2013, 391-399.

Weinstein, S., Graves, R. R. Creativity, schizotypy, and laterality. – *Cognitive Neuropsychiatry*, Vol 6, No 2, 2001, 131-146.

Weinstein, S., Graves, R. R. Are Creativity and Schizotypy Products of a Right Hemisphere Bias? – *Brain and Cognition*, Vol 49, 2002, 138-151.

Widiger, T. A., Trull, T. J. Plate Tectonics in the Classification of Personality Disorder. Shifting to a Dimensional Model – *American Psychologist*. Vol. 62, No. 2, 2007, 71–83.

Resüme

Müstilise kogemuse ja skisotüüpse isiksusejoonise vahelised seosed

Antud töö eesmärgiks oli uurida: Kas skisotüüpsete iseloomujoonte olemasolu mõjutab inimese võimalusi saada müstiline kogemus? Milline on skisotüüpse potentsiaalne mõju müstiliste kogemuste saamisele? Milline on loomingulisuse potentsiaalne vahendav efekt selles?

Püstitatud hüpotees on, et inimesed, kellel on rohkem skisotüüpseid isiksusejooni ehk kelle mittekliiniline skisotüüpne on kõrgem, saavad suurema tõenäosusega müstilisi kogemusi kui inimesed, kellel on vähem skisotüüpne isiksus.

Uurimus koosneb sissejuhatusest, kahest teoreetilisest peatükist ja empiirilisest osast. Esimeses sisupeatükis tutvustan müstiliste kogemuste, skisotüüpse ja loomingulisuse kontseptsioone. Teises sisupeatükis näitan, kuidas need võiksid omavahel olla seotud.

Empiiriline osa jaguneb kaheks. Esimese osa sisuks on Avila Teresa autobiograafia analüüs, kus kasutan DSM IV ja RHK 10 diagnostilisi manuaale, et viia läbi autobiograafia suunatud sisuanalüüs. Teises osas viin läbi osaleva välitöö käigus kogutud andmete analüüsi, kasutades risttabelit.

Teresa Avila autobiograafia analüüs näitas, et tal on mitmeid skisotüüpseid isikuomadusi ning ka omadusi, mida seostatakse loomingulisusega. Kuna analüüsisin vaid ühe müstiku elulugu, ei ole selle põhjal võimalik teha laiemaid järeldusi. Ainus, mida sellest võib järeldada, on see, et on tõenäoline, et Teresa oli skisotüüpne isiksus.

Kuna analüüsitavaid andmeid oli vaid üheksalt inimeselt, ei ole ka nende põhjal võimalik konkreetseid järeldusi teha. Võib küll näha mingit tendentsi skisotüüpsuse ja müstiliste kogemuste seosele, kuid see võib olla ka juhus.

Kokkuvõttes, kuna andmeid oli liiga vähe, ei ole võimalik teha lõplikke järeldusi hüpoteesi paikapidavuse kohta. Tarvis on edasisi uuringuid.

Lihtlitsents lõputöö reprodutseerimiseks ja lõputöö üldsusele kättesaadavaks tegemiseks

Mina, Elise Nemliher,

1. annan Tartu Ülikoolile tasuta loa (lihtlitsentsi) enda loodud teose „Associations between schizotypal personality and mystical experiences“, mille juhendaja on dr theol Roland Karo

1.1. reprodutseerimiseks säilitamise ja üldsusele kättesaadavaks tegemise eesmärgil, sealhulgas digitaalarhiivi DSpace-is lisamise eesmärgil kuni autoriõiguse kehtivuse tähtaja lõppemiseni;

1.2. üldsusele kättesaadavaks tegemiseks Tartu Ülikooli veebikeskkonna kaudu, sealhulgas digitaalarhiivi DSpace'i kaudu kuni autoriõiguse kehtivuse tähtaja lõppemiseni.

2. olen teadlik, et punktis 1 nimetatud õigused jäävad alles ka autorile.

3. kinnitan, et lihtlitsentsi andmisega ei rikuta teiste isikute intellektuaalomandi ega isikuandmete kaitse seadusest tulenevaid õigusi.

Tartu 08.05.2017

